

IN THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application.

177. (Currently Amended) A data management system, comprising:

a data management server system that receives a video source file for registration and a target file for comparison with the video source file, the video source file including at least one index frame each having a plurality of red-green-blue (RGB) data values and each comprising a pixel matrix of source pixel elements, each of the source pixel elements being associated with a pixel color value;

a key generation system that generates a key for the video source file by identifying a predetermined number of source elements in a selected index frame of the video source file as first source elements, each source element defining a pixel submatrix within the pixel matrix;

a source print generation system that

applies said key to the video source file, ~~that to~~ extracts the first source elements from the selected index frame in accordance with said key ~~via non-compression specific element extraction,~~ each of first source elements comprising the source pixel elements in the selected index frame that correspond with the pixel submatrix of a relevant key element,

determines an average source pixel color value for each of said first source elements of the selected index frame, said average source pixel color value comprising an average value of the pixel color values of the source pixel elements included in a relevant frame submatrix,

and that calculates an average value of the RGB data values for each of the first source elements of the selected index frame to form a file fingerprint;

a data embedding system that embeds an information block into the video source file, said information block including information pertaining to ownership of intellectual property rights;

a database system that stores the video source file with the embedded information block, said key, the first source elements, the file fingerprint, and ownership information of the video source file; and

a source print detection system that automatedly searches one or more portions of the target file for the occurrence of one or more first source elements in accordance with said key and that assigns a probability matching level to the target file,

wherein, if said probability matching level is greater than a predetermined matching threshold, the data management system accesses said ownership information to notify an owner of the video source file, ~~and the video source file and the target file are visually compared to determine a level of similarity between the video source file and the target file.~~

178. (Previously Presented) The system of claim 177, wherein said database system is at least partially incorporated with said data management server system.

179. (Previously Presented) The system of claim 177, wherein said source print generation system extracts the first source elements being defined by element characteristics selected from the group consisting of an element size, an element start position, and an element initial position relative to said element start position.

180. (Previously Presented) The system of claim 177, wherein said information block includes user-defined information.

181. (Previously Presented) The system of claim 180, wherein said user-defined information is at least partially encrypted.

182. (Previously Presented) The system of claim 177, wherein said information block includes information selected from the group consisting of copyright information, trademark information, licensing information, mandatory compliance information, authorized user information, authorized website information, a file description, and at least one file attribute.

183. (Previously Presented) The system of claim 182, wherein said mandatory compliance information includes information selected from the group consisting of identification information, age information, custodial information, and other mandatory information required by law for image data.

184. (Previously Presented) The system of claim 177, wherein said data management system is in communication with at least one external computer system.

185. (Previously Presented) The system of claim 184, wherein said data management server system provides the video source file with said embedded information block to authorized users associated with one or more of the at least one external computer system.

186. (Previously Presented) The system of claim 184, wherein said source print detection system includes a search member that searches one or more of the at least one external computer system for target files to be compared with the video source file.

187. (Currently Amended) A method for managing data, comprising:

receiving a video source file for registration, the video source file including at least one index frame each having a plurality of red-green-blue (RGB) data values and each comprising a pixel matrix of source pixel elements, each of the source pixel elements being associated with a pixel color value;

generating a key for the video source file by identifying a predetermined number of source elements in a selected index frame of the video source file as first source elements, each source element defining a pixel submatrix within the pixel matrix;

applying said key to the video source file;

extracting the first source elements from the selected index frame in accordance with said key ~~via non-compression specific element extraction,~~ each of first source elements comprising the source pixel elements in the selected index frame that correspond with the pixel submatrix of a relevant key element;

determining an average source pixel color value for each of said first source elements of the selected index frame, said average source pixel color value comprising an average value of the pixel color values of the source pixel elements included in a relevant frame submatrix;

calculating an average value of the RGB data values for each of the first source elements of the selected index frame to form a file fingerprint;

embedding an information block into the video source file, said information block including information pertaining to ownership intellectual property rights;

storing the video source file with the embedded information block, said key, the first source elements, the file fingerprint, and ownership information of the video source file;

receiving a target file for comparison with the video source file;

automatedly searching one or more portions of the target file for the occurrence of one or more first source elements in accordance with said key;

assigning a probability matching level to the target file; and

if said probability matching level is greater than a predetermined matching threshold,

accessing said ownership information to notify an owner of the video source file; and

~~visually comparing the video source file and the target file to determine a level of similarity between the video source file and the target file.~~

188. (Previously Presented) The method of claim 187, wherein said generating said key includes providing at least one data parameter associated with a selected characteristic of said key and incorporating said at least one data parameter into said key.

189. (Previously Presented) The method of claim 188, wherein said providing said at least one data parameter includes providing said at least one parameter selected from the group consisting of a predetermined number of source elements, an element size, an element start position, an element initial position relative to said element start position, an element type, and an element length.

190. (Previously Presented) The method of claim 187, wherein said extracting the source elements includes extracting the source elements from the video source file having data in a compressed format.

191. (Previously Presented) The method of claim 190, wherein said extracting the source elements includes expanding the data of the video source file.

192. (Previously Presented) The method of claim 187, wherein said extracting the source elements includes forming a concatenated string of the source elements.

193. (Previously Presented) The method of claim 187, wherein said extracting the source elements includes normalizing data of the video source file and extracting the normalized data from the video source file.

194. (Previously Presented) The method of claim 187, wherein said embedding said information block includes at least partially encrypting said information block.

195. (Previously Presented) The method of claim 187, wherein said receiving said source file includes communicating with an external computer system.

196. (Previously Presented) The method of claim 195, further comprising searching one or more of the at least external computer system for target files to be compared with the video source file.

197. (Previously Presented) The method of claim 195, further comprising providing the video source file with said embedded information block to authorized users associated with one or more of the at least one external computer system.

198. (Previously Presented) The method of claim 187, wherein said extracting the first source elements comprises extracting the first source elements from the video source file via compression specific element extraction.

Claims 199-201. (Canceled)

202. (Currently Amended) A computer program product for managing data, the computer program product being encoded on more or more machine-readable storage media and comprising:

instruction for receiving a video source file for registration, the video source file including at least one index frame each having a plurality of red-green-blue (RGB) data values and each comprising a pixel matrix of source pixel elements, each of the source pixel elements being associated with a pixel color value;

instruction for generating a key for the video source file by identifying a predetermined number of source elements in a selected index frame of the video source file as first source elements, each source element defining a pixel submatrix within the pixel matrix;

instruction for applying said key to the video source file;

instruction for extracting the first source elements from the selected index frame in accordance with said key ~~via non-compression-specific element extraction,~~ each of first source elements comprising the source pixel elements in the selected index frame that correspond with the pixel submatrix of a relevant key element;

instruction for determining an average source pixel color value for each of said first source elements of the selected index frame, said average source pixel color value comprising an average value of the pixel color values of the source pixel elements included in a relevant frame submatrix;

instruction for calculating an average value of the RGB data values for each of the first source elements of the selected index frame to form a file fingerprint;

instruction for embedding an information block into the video source file, said information block including information pertaining to ownership intellectual property rights;

instruction for storing the video source file with the embedded information block, said key, the first source elements, the file fingerprint, and ownership information of the video source file;

instruction for receiving a target file for comparison with the video source file;



instruction for automatedly searching one or more portions of the target file for the occurrence of one or more first source elements in accordance with said key;

instruction for assigning a probability matching level to the target file; and

instruction for, if said probability matching level is greater than a predetermined matching threshold, accessing said ownership information to notify an owner of the video source file; and

~~visually comparing the video source file and the target file to determine a level of similarity between the video source file and the target file.~~